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## **BEHAVIORAL FACTORS OF EARNINGS MANAGEMENT FOR EXECUTIVE STOCK OPTION EXERCISE DECISIONS**

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### **ABSTRACT**

*Tujuan penelitian ini adalah menguji faktor-faktor berperilaku eksekutif atas perilaku pengelolaan laba berkaitan dengan program penawaran opsi saham eksekutif pada perusahaan-perusahaan yang terdaftar di Bursa Efek Indonesia. Konsisten dengan Heath dan Huddart (1998) bahwa eksekusi terhadap opsi saham eksekutif merupakan respon terhadap pergerakan harga saham. Penelitian ini mengirim 75 kuesioner dan kembali sebanyak 52, tetapi 2 kuesioner tidak menjawab secara lengkap dan dikeluarkan sebagai sampel, sehingga sampel akhir sebanyak 50. Analisis data menggunakan regresi berganda terdiri atas 3 (tiga) variabel independen dan 1 variabel dependen. Hasil penelitian menunjukkan bahwa nilai opsi saham dan desain kompensasi menjadi faktor yang dipertimbangkan manajer untuk melakukan pengelolaan laba, namun tidak demikian untuk faktor pengukuran kinerja. Semakin besar nilai kompensasi yang diterima, semakin besar kemungkinan manajer melakukan pengelolaan laba. Sebagai tambahan, kompensasi jangka panjang menunjukkan desain penghargaan kepada para eksekutif yang memiliki kemampuan dan loyalitas yang tinggi, sehingga mengikat untuk jangka waktu panjang melalui opsi saham eksekutif. Hal tersebut semakin memotivasi eksekutif untuk meningkatkan kinerja mereka melalui pengelolaan laba karena untung diperoleh dari perbedaan antara harga pasar pada saat jatuh tempo dengan harga eksekusi pada tanggal hibah.*

*Kata kunci: Program Opsi Saham Karyawan, Eksekusi, Nilai Opsi Saham, Desain Kompensasi, Pengukuran Kinerja.*

### **INTRODUCTION**

During the last two decades economists have made much progress in understanding incentives, contracts and organizations. Yet, they constrained their attention to a very narrow and empirically questionable view of human motivation. Contract theory or principal-agent theory, for example, typically restrict their attention to the motives to achieve income through effort and to avoid risks.

An executive stock option program (ESOP) compensation give management a right to purchase a certain number of shares in the future at a specified price determined at the time the options are offered before expired date, during the employees still become company employees. Executive stock options are call options given by employing firms to their employees in compensation for labor services. Typically, at the time an option is granted, its strike price is set equal the firm's concurrent stock price. Usually, during the first portion of its life (the vesting period), the employee cannot exercise his options and in fact must forfeit them should he be fired or voluntarily resign. After the vesting date, typically three years after the grant date, the executive can exercise his options at any time until maturity (usually seven years after the vesting date) but cannot sell or otherwise transfer them. Indeed, if he leaves the firm during this period, he is usually forced to choose between forfeiting or exercising his options within a short time after his departure.

Psychological problems of human resources within the business entity to get serious attention today. The condition can be understood as human resources is an asset that is very economical, but it is unique. Stored therein various potentials that require specific techniques to explore the sometimes different from the others. One of potential problem in agency theory is agency problems that arise between the management (as agent) by the shareholders (as principals), between superior and subordinate, and also between management and bondholders (bond holder). Each policy will trigger a psychological reaction from the parties who use the information or the parties that have control flow. They will consider everything, to make inferences and tend to act if profitable. This phenomenon encourages the parties that have authorized (agents and principals) to develop behavioral approach (Heath and Huddart, 1998).

One class of behavioral theories (belief) would predict that option holders will exercise in response to recent stock returns. Belief-based models of investor behavior have received increasing attention in the finance literature over the last few years. Research in psychology has indicated that individuals sometimes expect trends to continue and sometimes expect mean-reversion (Kahneman and Tversky, 1973; Tversky and Kahneman, 1971). A second class of behavioral models (values) emphasizes that the values of options holders may change depending on whether they are above or below a reference point.

Yermack (1997) examines the stock returns around 620 stock option awards between 1992 and 1994. He interprets these result as devidence that executives opportunistically time awards to occur before anticipated stock price increases. Chauvin and Shenoy (2000) examine the cumulative abnormal returns before stock option grants and suggest that executives benefit from stock price decreases before the stock option grants and stock price increases after the grants. The belief that managers and directors should be compensated in stock and stock options in order to create high-powered incentives for them to maximize share value follows naturally from the approach of using the

economists' model of human behavior to analyze corporate governance questions (Hartono, 1997). Economic analysis is based on a set of assumptions about the way people work in groups. In particular, part of the conventional wisdom has been that directors and managers of companies will always make decisions in ways that serve their own personal interests unless they are either tightly monitored and constrained (which is costly, and raises the question of who will monitor the monitors), or given very strong incentives to manage in the interests of shareholders (Antle and Smith, 1986). This premise about the way the world works has led to a small industry of compensation consultants who have advised firms to pay corporate executives and directors in stock options, so that they would be highly motivated to get the company's stock price to go up in the next period (Christie and Zimmerman, 1994).

The problem has been that stock options, as discussed above, create skewed incentives for executives - option holders win big if the stock goes up, but they are not penalized if the stock price goes down. Furthermore, the models used by the compensation consultants often provide that if the stock price goes down, then options should be repriced, or executives should be awarded a large number of additional options (with a lower strike price) so that they will again be well-motivated to get the stock price to go up from wherever it is at the time.

As a new program, research on ESOP becomes very important to know how developed ESOP phenomenon in Indonesia. This study has several motivations are to give foundation that provides the basis for research in the field of financial accounting related to the ESOP in Indonesia. Further motivation, namely to expand research in the field of ESOP and to obtain empirical evidence of benefits of ESOP to the company. Asyik (2006) found that corporate executives have the competence to control the company's profits. By the grant of stock options (exposure) of the executive management of the company has made earnings management by lowering the amount of discretionary accruals in order for the company's stock market prices decline. These conditions allow them to do because the earnings information is used, both the investors and potential as an indicator to assess the company in relation to the stock price prediction. Ball and Brown (1968) and Beaver and Engel (1996) empirically proved that the company's earnings information was responded positively by investors in the New York Stock Exchange.

There are a number of behavioral factors of ESOP offering that cause earnings management behavior by the executive. Heath and Huddard (1998) states the opinion of the direction of the behavioral models of values that the value of stock options may change the behavior of managers (and hence change the behavior of risk) depends on whether the value is above or below what they wanted. Adli (2001) also revealed that the design of incentive compensation is not limited to cash compensation and bonus (short-term compensation), but also the stock compensation (long-term compensation). Types of

long-term compensation becomes an important alternative to obtaining the maximum gain on market price movements. In addition, Sumirah (1998) also predicts that the holders of stock options will be considered a performance measurement system both based on internal performance and market based. These factors into consideration by executive to take the rights over the stock options and a trigger factor for earnings management in order to obtain a favorable difference between the stock price at the expired time with the execution price on the grant date, so that executives can gain maximum.

Based on the above background, then the main issues raised in this research is what behavioral factors are causing executives to do management earnings for ESOP offering. In keeping with the research issues raised, the purpose of this study is to examine the behavioral factors that influence the behavior of earnings management by executives around offer of the ESOP.

## **THEORETICAL FRAMEWORK**

### **Agency Theory**

Research on incentive systems in relation to earnings management has evolved since the study conducted Healy (1985) by using the approach to management bonus program. Healy assumed that the company consists of a manager who is reluctant to risk and one or more owners. Healy uses bonuses formula to managers as follows:

$$B'_t = p \{ \min \{ U', \max \{ (E_t - L, 0) \} \} \} \quad (1)$$

in which  $p$  is the percentage of bonus payments as stated in the contract bonus,  $L$  is the lower earnings limit ( $E_t$ ), and  $U$  is the upper limit on excess earnings above the lower limit ( $E_t - L$ ). In the literature, the lower limit is BOGEY and the upper limit is CAP (Scott, 2000). Studies show that managers will not receive bonuses when earnings are below the lower limit and receive a bonus of  $P(E_t - L)$  when the earnings is between lower limit and upper limit, and receive a bonus fixed at  $p U'$  when earnings exceed the upper limit. Research of Healy (1985) is the starting point for further research, especially in studies related to the management system of incentives and profit.

Actual agency problem arises when the principal difficulty to ensure that agents act to maximize the welfare of the principal. According to agency theory, one of the mechanisms that are widely used and is expected to align principal and agent goals is through the financial reporting mechanisms. Because of the trend for managers to looking for our benefit (moral hazard) and the level of high information asymmetry, plus a certain motives, the likelihood of management to utilize accrual items to present the earnings in

accordance with the interests that might not fit with the interests of principals, such as owners, holders of shares, or lenders.

Problems that arise in agency relationships by Eisenhard (1989) is the assumption of human nature (self interest, Bounded Rationality, and risk aversion), so that the pressure in the theory of agency is an organization (the goal conflict among members) and information (a commodity which can be purchased). With this human nature, then the principal needs to control the agent to do the work in accordance with the delegated authority. Control of the agent can be done through monitoring, risk sharing, or both. Efforts to minimize or control the agent-principal conflict can be classified into three main categories, namely: (1) market discipline, (2) compensation structure, and (3) monitoring mechanisms (Traichal et al., 1999).

Various conflicts of interest both among managers with shareholders, managers with creditors or among shareholders, creditors, and managers due to the existence of agency relationships (agency relationship). Principal Parties may limit the divergence of interests by providing a proper level of incentives to the agent and should be willing to pay supervision (monitoring cost) to prevent the hazard from the agent. Such characteristics are often referred to as agency costs (agency costs). In general, it is impossible for a principal or agent, at the level of agency costs at zero, can guarantee that the agent will make optimal decisions from the perspective of the principal.

There are several alternatives to reduce conflicts of interest and agency costs. First, increase the company's stock ownership by management. This ownership will align management interests with shareholder interests (Jensen and Meckling, 1976). The second alternative, increasing the ratio of dividends to net income (dividend payout ratio), thus there is not enough a lot of free cash flow and the management was forced to seek external funding sources for investment financing. Definition of free cash flow is the availability of funds in the amount that exceeds the need for funding for profitable investments. If the profits are divided as dividends, so the investment needs to be sought from external funding sources. This external financing will improve oversight by external parties such as supervisors of capital markets, investment bankers (investment bankers), and investors.

While the last alternative is to increase funding to the debt. Increased debt will reduce the scale of the conflict between shareholders and management (Jensen and Meckling, 1976). This is understandable because if the company requires a credit, it must be ready to be evaluated and monitored by external party and that will reduce conflict between management and shareholders. In addition, the debt will also reduce the excess cash flow that is in the company, so reducing the possibility of waste management undertaken.

### **Executive Stock Option Plan (ESOP)**

Share optional program is one of the programs involving various human resources in a company. This program is widely used in planning and compensation by the companies registered at Stock Market. The adoption of share optional program is expected to be able to minimize problem of agency as well as to stimulate commitment and control of executive employees to company. This program is also expected to increase the value of companies through company performance improvement.

As an incentive to appreciate the long-term performance of the company, ESOP is an effective step to narrow and reduce the agency problems and agency cost through alignment of interest the executives with the shareholders (Brenner et al., 2000). Ownership of shares by employees of the company (insiders) to give the impression as a financial investment. Ownership will provide a great feeling of satisfaction and commitment to the company's control (Klein, 1987; Frech, 1987) in Iqbal and Abdul (2000).

ESOP is expected to improve the performance of agents who will be reflected in the earnings information that is often called the accounting earnings. Expectations are not excessive because the theoretical equity-based compensation will indirectly consider existence of labor, so that in the long run, companies will have employees who are generally qualified and holds proprietary concepts in carrying out the duties of the company.

Implementation of compensation system is expected to be able to attract and retain competent employees, as well as management decisions relating to the maximization of shareholder wealth value. Empirical evidence shows that management performance, as measured by the wealth of shareholders, related positively and strongly with management compensation (Murphy, 1985), although the change in management wealth is very small compared with changes in shareholder wealth (Jensen and Murphy, 1990). Compensation program is intended to encourage management to maximize the value that reflected the company's profitability or stock price. In addition, management compensation program is also intended to reduce conflicts of interest between owners and management, because the company's value maximization efforts (through the compensation program) is also an effort to increase the management welfare. Further associated with the outcome or performance that management obtained, then the payment package design of corporate executives (corporate executive pay package) can be determined in an effort to reduce agency costs between shareholders and managers (Murphy and Zimmerman, 1993).

Kaplan and Atkinson (1998) states that compensation contracts motivate corporate executives, so that the executive compensation program should be competitive enough to attract and retain high quality managers, linking bonuses to performance, and able to

develop performance-oriented climate within the company by giving rewards to performance assessed well.

### **Studies on Earnings Management**

Healy (1985) states that asymmetric information between investors and management give an opportunity to companies to make earnings management. This resulted in the emergence of the information gap between the company management with the users of financial statements and open opportunity to do window dressing valid through accrual policy settings. In this case, the agency theory states that the contract between agent and principal, which involves two parties are equally encouraged to benefit themselves, will result in conflict.

The emergence of earnings management behavior is driven by changes in corporate control. The Company consists of management (agents) who are appointed or given delegation by shareholders (principals) to make decisions, they try to maximize utility, but management has more opportunities to maximize utility.

Studies on earnings management in particular examine situations in which the conflicting parties have the incentive to monitor (adjust) accounting numbers (in the form of manipulation). Studies estimate the discretionary component of total accruals is used as a measure of earnings management. Policy components in total accruals is more appropriate in this context, given the public the company seems more interested in earnings before tax that includes all the effects of accrual accounts, and some of them are used to measure earnings. Watts and Zimmerman (1986) states that companies that base compensation on the basis of earnings has incentive to set the earnings in order to maximize their own interests by selecting accounting policies that increase profits.

Cahan (1992), Naim and Hartono (1996), and Hall and Stammerjohan (1997) to evaluate earnings management using categorical variables (dummy) to see whether the factor (which allegedly is) triggered earnings management is correlated with the level of discretionary accruals.

### **Hypotheses about Factors which impact Earnings Management for offering Executive Stock Option Plan (ESOP)**

There are several reasons underlying the impact of ESOP on earnings management. First, the structure of compensation may provide incentives to manage earnings and EPS. Healy (1985) and Holthausen et al. (1995) showed that managers try to manage earnings to maximize the present value (present value) bonus payments. Second, EPS is an important factor to evaluate the performance and appraisal companies. Companies often focus on EPS and EPS growth in their annual reports to shareholders.

Gao and Shrieves (2002) examine empirically whether the design of compensation contracts consisting of stock options and stock bonuses and restricted affect the intensity of earnings management. Results showed that the influence of some components of compensation largely predictable on allegations that managers behave in an opportunistic. Thus indicated that by offering stock options, top management was trying to do earnings management.

Earnings management is effective in influence stock prices, executive action should be communicated to the financial markets such as the announcement of earnings or other voluntary disclosures. If managers are able to influence the structure of compensation contracts, research expects managers will receive grants of stock options immediately prior to the good news pushed the stock price increases. In other words, executives can increase the value of their option to receive an option on the date when the company's stock price is relatively low. Previous studies found that the negative abnormal stock returns before the offer of grants of stock options and positive after the grant offer stock options (Yermack, 1997; Aboody and Kasznik, 2000; Chauvin and Shenoy, 2000). Stock return patterns around offering stock options is consistent with opportunistic behavior of executives who aims to increase the value of their options.

Based on these conditions, the research modify hypothesis by considering behavioral factors that influence earnings management actions on the ESOP bid. Heath and Huddard (1998) states the opinion of the direction of the behavioral models of values that the value of stock options may change the behavior of managers (and hence change the behavior of risk) depends on whether the value is above or below what they wanted. Adli (2001) also revealed that the design of incentive compensation is not limited to cash compensation and bonus (short-term compensation), but also the stock compensation (long-term compensation). Types of long-term compensation becomes an important alternative to obtaining the maximum gain on market prices movements. In addition, Sumirah (1998) also predicts that the holders of stock options will be considered a performance measurement system both based on internal performance and market based. These factors into a basic consideration by executive to take the rights over the stock options and a trigger factor for earnings management in order to obtain a favorable difference between the stock price at the expired time with the execution price on the grant date, so that executives can gain maximum.

Therefore, an operational hypotheses in an alternative hypotheses is advanced of follows:

- H<sub>1</sub>:** Value of executive stock options affect the behavior of the executive to make earnings management.
- H<sub>2</sub>:** Design of executive compensation affect the behavior of executives to make earnings management.
- H<sub>3</sub>:** Executive performance measurement systems influence executive behavior for earnings management.



## RESEARCH METHOD

### Data and Sample

This study sent 75 questionnaires that the contents were addressed to the executive. Questionnaires sent through the electronic facility based corporate secretary email address of each company has to offer ESOP. ESOP implementation of the sensitivity tests done by comparing the pattern of executive behavior, as was done Asyik (2007) by spreading the questionnaire is door to door to each company. Based on questionnaires sent, only 52 are sent back questionnaires and answers, but as many as 2 incomplete questionnaire data that was issued as a sample, so the final sample is 50.

### Variable and Operational Definition

Dependen variable is discretionary accrual that estimated using modified Jone's model (Dechow et al., 1995) to measure earnings management level. Based on the model of Healy (1985), Jones (1991) introduced the model to separate discretionary accruals from the accrual nondiscretionary. In this study, discretionary accruals will measured use: (1) accruals estimation models used Jones (1991) and (2) the average accrual whole observation.

$$DA_{it} = TA_{it-1}/A_{it-1} - [a_1(1/A_{it-1}) + b_2(\Delta REV_{it} - \Delta REC_{it}/A_{it-1}) + b_3(PPE_{it}/A_{it-1})] \quad (2)$$

in the above equation,  $Da_{it}$  is the discretionary accrual firm  $i$  at period  $t$ .  $\Delta REV_{it}$  is the company's revenue firm  $i$  at period  $t$ ,  $\Delta REC_{it}$  is the company's accounts receivable firm  $i$  in period  $t$  minus the company's accounts receivable in the period  $t-1$ ,  $PPE_{it}$  is the company's fixed assets firm  $i$  at period  $t$ ,  $\varepsilon_{it}$  is the residual error firm  $i$  at period  $t$ .

Independen variable of hypotheses 1, 2, and 3 are stock option value, compensation design, and performance measurement.

- (1) The value of stock options. Heath and Huddard (1998) states that the value of stock options may change the behavior of managers (and hence change the behavior of risk) depends on whether the value is above or below what they wanted. Variable of stock options value is measured using a Heath and Huddart's questionnaire (1998) with modification and using 5-point scale with the lowest score (point 1) showed very little success, being the highest score (points 5) showed very satisfactory.
- (2) Compensation Design. Adli (2001) reveals that compensation incentives are not limited to cash compensation and bonus (short-term compensation), but also the stock compensation (long-term compensation). Variable of compensation design is measured using a Adli's questionnaire (2001) with modification and using 5-point scale with the lowest score (point 1) indicates strongly disagree, being the highest score (points 5) indicates strongly agree.

- (3) Performance Measurement. Sumirah (1998) predicts that the holders of stock options will be considered a good performance measurement system based on internal performance and market based. Variable of Performance measurement measured using Sumirah's questionnaires (1998) with modification and using 5-point scale with the lowest score (point 1) shows ever, was the highest score (points 5) shows very often/always.

While variable of earnings management measured on a scale 5 points with the score lowest (point 1) shows no role, being the highest score (points 5) showed a full role.

### Method of Analysis

This research utilises primary analysis tool is multiple linear regression and to examine influence of behavioral factors for stock option grant proportion on discretionary accruals, specification of research model as follow:

#### Research Model:

$$DA_{(it)} = \beta_0 + \beta_1 SOV_{it} + \beta_2 CD_{it} + \beta_3 PM_{it} + \varepsilon_{it} \quad (3)$$

where  $DA_{(it)}$  is discretionary accruals,  $SOV_{it}$  is stock option value,  $CD_{it}$  is compensation design,  $PM_{it}$  is performance measurement,  $\varepsilon_{it}$  is error.

## EMPIRICAL RESULTS AND INTERPRETATION

### Descriptive Statistics

Table 1 summarizes the descriptive statistics of variables for the sample as a whole to test the behavior of earnings management over offering employees stock options.

**Table 1**  
**Descriptive Statistics of Research Variable**

Variable	N	Mean	Standard Deviation	Minimum	Maximum
DA	50	3,535	0,717	1,970	4,630
SOV	50	2,085	0,552	1,030	2,960
CD	50	-0,657	0,175	-0,980	-0,350
PM	50	0,973	0,273	0,500	1,440

Description:

AD = Accrual Discretionary, SOV = Stock Option Value, CD = Compensation Design, PM = Performance Measurement

Average data and standard deviation are used to determine the fluctuations of each variable tested, being the minimum and maximum data shows ranging (range) of normal data to avoid biased results. Standard deviation of all the variables are relatively small in value, it shows that earnings management behavior of firms in the sample relating to employee stock option programs are not too varied. Standard deviation values are not too large it also shows that the distortion level of each variable is not significant.

### **Test of Validity and Reliability**

Associated with earnings management behavior of managers for offer stock options, the research done by doing a sensitivity test with digging behavioral factors making these stock options. Behavioral factors making the stock options referred to Heath and Huddart (1998), Sumirah (1998), and Adli (2001). Behavioral factors used in this study are: (1) value of stock options, (2) the design of compensation, and (3) performance measurement. Indicated these factors affect the behavior of managers to do earnings management on offering stock options.

#### **Test of validity**

Validity test is intended to measure the extent to which instruments are used actually measure what is supposed to be measured. To test the validity of this study used factor analysis. Variables are expected to have an MSA value (Measures of Sampling Adequacy) above 50, so that the data collected can be said right to factor analysis, and also indicating the construct validity of each variable.

#### **Test of Reliability**

Reliability test is intended to measure the instruments used completely free of error, which is expected to produce consistent results. In this study, reliability of questionnaire instruments tested using the coefficient values of cronbach alpha. These variables can be said reliable if cronbach alpha has a value greater than 60.

Test results are presented in Table 2 shows that the research instruments used in this study quite reliable and valid. Test results showed that the value of the MSA and loading value to the overall number of variables used in over 50% so it can be concluded that all the variables is valid.

**Table 2**  
**Validity and Reliability Test**

Variable	RELIABILITY	VALIDITY	
	Alpha Cronbach	MSA	LOADING
DA	0,754 (Andal)	0,650	0,509 - 0,768
SOV	0,762 (Andal)	0,755	0,500 - 0,825
CD	0,813 (Andal)	0,677	0,557 - 0,799
PM	0,606 (Andal)	0,626	0,500 - 0,775

Description:

AD = Accrual Discretionary, SOV = Stock Option Value, CD = Compensation Design, PM = Performance Measurement

### Data Analysis

Hypothesis testing is intended to examine the factors that affect managers to do earnings management associated with stock options. Table 3 presents the analysis of the behavioral factors making stock options on earnings management.

**Table 3**  
**Regression Result of Questionnaire Test**  
 $DA_{(it)} = \beta_0 + \beta_1 SOV_{it} + \beta_2 CD_{it} + \beta_3 PM_{it} + \epsilon_{it}$

Variable	Coefficients	t-statistics	p-value
Intercept	3,351	6,442	0,000
SOV	0,501	2,848	0,007 ***
CD	1,820	3,263	0,002 ***
PM	0,346	1,021	0,313
R2 (Adjusted)	0,495 (0,196)		
F	4,974 ***		

Description:

AD = Accrual Discretionary, SOV = Stock Option Value, CD = Compensation Design, PM = Performance Measurement

\*\*\* The statistical significant at the 0.01 level

\*\* The statistical significant at the 0.05 level

\* The statistical significant at the 0.10 level

F value is 4.974 with a value of probability = 0.005, thus a statistical significant at 1%. The amount of R<sup>2</sup> is 0.495, which means that the variations in the level of earnings management is described by behavioral factors making stock options for 49.5%. The remaining 50.5% described other variables that are not included in the research model.

The results of the analysis in Table 3 shows that the coefficient SOV ( $\beta_1$ ) is 0.501 with a p-value of 0.007, it is statistical significant at 1% level. Besides, the coefficient CD ( $\beta_2$ ) is 1.820 with a p-value of 0.002, it is also statistical significant at 1% level. The latter coefficient PM ( $\beta_2$ ) with a p-value of 0.313 was not significant in statistical.

The results showed that the value of options and design of compensation to be considered for the manager to manage earnings. The greater the value of compensation received, the more likely managers do earnings management. This shows that the more stock options offered to employees with a relatively high value, the more managers are motivated to do earnings management. The results of this study are consistent with previous studies of the behavior of managers who expect the amount received stock options so that a relatively large gain to be obtained is also growing.

This condition is further supported by the positive price movement increasingly rising. Thus, this study successfully reject  $H_{01}$ . This research is consistent with Heath and Huddard (1998), Chauvin & Shenoy (2000), Baker et al., (2002), and Balsam et al., (2003). In addition, long-term compensation design suggests that the awards to executives who have the capability and high loyalty, so that the binding for a period through the ESOP will increasingly motivate executives to increase their performance, so the higher difference between the market price at maturity execution with price on the grant date indicates the actual gain will be obtained by the executive. Thus, this study successfully reject  $H_{02}$ . The results are consistent with previous studies that the company is offering compensation in the form of ESOP will have a greater motivation to do earnings management in order to earn large gain on the difference between the price of making stock options with stock market prices (Yermack, 1997; Adli, 2001 ; Gao & Shrieves, 2002).

The results showed that performance measurement does not prove to be the underlying factor to earnings management by executives associated with the ESOP. This is because the actual performance measurement conducted at the new stock option maturity, and performance measurement during the vesting period is only a prediction performance measurement, it is less desirable by the executive (AICPA, 1972). Similarly, the Financial Accounting Standards through the Statement of Financial Accounting Standards (PSAK) No. 53, the measurement of stock options offered to employees in exchange for employee services have clearly measured and recognized at fair value of stock options (IAI, 2001). Fair value of stock options estimated by public companies using the model option awards including the Black Scholes model or binomial model (FASB, 1995).

The model requires companies award options to make some estimations of them: (1) period of expected stock options, (2) volatility of expected stock price, (3) expected risk-free interest rate, and (4) expected dividend yield. When estimating these factors affect the fair value of stock options (hereafter affect the amount of monetary options), companies can reduce the number of dollars of stock options to regulate these factors (Johnston-Wilson, 2003). Based on the fair value approach to stock-based compensation, the company estimates the fair value of stock options at grant date using a model of option awards, such as the Black-Scholes or binomial model.

In this model, the fair value of stock options is determined as a function of increasing (increasing function) on the variables of price volatility and risk-free rate, and a decreasing function (decreasing function) on the dividend yield variable. When the number of dollars of stock options is based on the fair value of stock options, price volatility and risk free rates are much lower estimated (underestimated) and the estimated dividend yield is higher (overestimated) causes the number of dollars of compensation based on estimated shares would be lower. Thus, companies can reduce the number of dollars of stock options is reflected in accounting profit by adjusting the model factors such option awards. Thus, this study successfully reject  $H_{03}$ . The results are consistent with previous studies, especially about the option awards model factors (Johnston-Wilson, 2003).

## **CONCLUSIONS & DISCUSSIONS, IMPLICATIONS, LIMITATIONS, AND SUGGESTIONS**

### **Conclusions and Discussions**

The results showed that the value of option and design of compensation to be considered for the manager to manage earnings. The greater the value of compensation received, the more likely managers do earnings management. This shows that the more stock options offered to employees with a relatively high value, the more managers are motivated to do earnings management.

In addition, long-term compensation design suggests that the awards to executives who have the capability and high loyalty, so that the binding for a period through the ESOP will increasingly motivate executives to increase their performance, so the higher difference between the market price at maturity execution price with the grant date indicates the actual gain will be obtained by the executive.

### **Implication Result of Research**

This Research answer issue that employee stock option program can become manager determinant do earnings management. Thereby result of research of consistence with

problem of agency that is existence of conflict of interest between manager with shareholder. Pursuant to finding that management manage the date of financial statement publication and date of offer of stock option can give consideration at circle of regulator in specifying regulation which related to stock exchange, specially regarding information disclosure.

### **Limitation of Research**

This Research only considering long-range stock-based compensation variable in its bearing with behavior of management to manage earnings because influenced by difficulty of researcher get data concerning short-term compensation and non physical compensation.

Research sample consist of executives who receive compensation in the form of ESOP and the questionnaire was sent via electronic facilities to send an email to the corporate secretary of each company that offers ESOP. The results can be biased, because of the uncertainty of respondents who answered whether the executive actually receiving ESOP or not. However, this study tried to provide additional information related to the data has been collected in the year 2004 namely data collection with door to door method to each company (pick-up ball method). The results obtained (Asyik, 2007) in line with the results of this research.

Despitefully, this research do not base election of research sampel pursuant to offer of stock option at is same period, however select research sampel each phase as according to period when company apply ESOP. Additional test regarding examination of behavioral factors in its bearing with exercise of stock option use compiled kuesioner byself by researcher so that still need furthermore verification as according to condition in Indonesia.

### **Suggestion**

Examination with perception which is longer to be expected to get research sampel which quite a lot and give result of better. Despitefully, next research can test obtained research sampel pursuant to is same period to know do there is difference of behavior of earnings management relate to stock option, so that can be obtained by comparison with examination use research sampel pursuant to period when company start to apply stock option program.

In addition, subsequent research should consider methods of data collection that is not biased, for example using the appropriate respondents.

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